

**Bill of Materials**
**TI DESIGNS TIDA - 00555**

Qty	Reference	Part Description	Manufacturer	Manufacturer Part Number	PCB Footprint	DNle
1	!PCB1	Printed Circuit Board	Any	TIDA-00555		
15	C1, C3, C4, C8, C11, C12, C17, C19, C20, C46, C47, C52, C57, C64, C70	CAP, CERM, 0.1uF, 25V, +/-5%, X7R, 0603	AVX	06033C104JAT2A	603	
6	C2, C9, C18, C55, C61, C68	CAP, CERM, 330 pF, 50 V, +/- 10%, COG/NP0, 0805	AVX	08055A331KAT2A	805	
31	C5, C13, C23, C30, C49, C58, C66, C71, C75, C78, C80, C83, C85, C106, C109, C113, C114, C118, C120, C122, C125, C129, C130, C134, C136, C138, C141, C145, C146, C150, C152	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0603	Kemet	C0603C104K5RACTU	603	
29	C6, C14, C25, C27, C50, C73, C77, C79, C81, C82, C86, C108, C112, C115, C116, C117, C121, C123, C128, C131, C132, C133, C137, C139, C144, C147, C148, C149, C153	CAP, CERM, 10uF, 35V, +/-20%, X7R, 1210	Taiyo Yuden	GMK325AB7106MM-T	1210	
4	C7, C15, C26, C51	CAP CER 1000PF 1KV 10% RADIAL	Vishay BC Components	S102K29Y5PN63J5R		
1	C10	CAP, CERM, 1000 pF, 50 V, +/- 10%, COG/NP0, 0603	AVX	06035A102KAT2A	603	
2	C16, C28	CAP, AL, 22uF, 25V, +/-20%, 0.76 ohm, SMD	Nichicon	UUD1E220MCL1GS	5x5.8	
6	C21, C22, C24, C29, C32, C34	CAP, CERM, 100 pF, 50 V, +/- 5%, COG/NP0, 0603	Kemet	C0603C101J5GAC	603	
16	C31, C33, C35, C38, C42, C43, C44, C45, C54, C56, C60, C62, C63, C65, C67, C103	CAP, CERM, 1 µF, 16 V, +/- 10%, X7R, 0603	MuRata	GRM188R71C105KA12D	603	
2	C36, C105	CAP, CERM, 0.1 µF, 16 V, +/- 5%, X7R, 0603	AVX	0603YC104JAT2A	603	
2	C37, C102	CAP, CERM, 10uF, 25V, +/-20%, X5R, 0603	MuRata	GRM188R61E106MA73	603	
1	C53	CAP, CERM, 4.7uF, 10V, +/-10%, X5R, 0603	AVX	0603ZD475KAT2A	603	
1	C59	CAP, TA, 4.7uF, 35V, +/-10%, 1.9 ohm, SMD	Vishay-Sprague	293D475X9035C2TE3	6032-28	
8	C72, C84, C110, C119, C126, C135, C142, C151	CAP, CERM, 4.7uF, 50V, +/-10%, X5R, 0805	TDK	C2012X5R1H475K125AB	805	
8	C74, C76, C107, C111, C124, C127, C140, C143	CAP, CERM, 0.01uF, 100V, +/-5%, X7R, 0603	AVX	06031C103J4Z4A	603	
9	D1, D2, D3, D4, D5, D6, D9, D11, D14	LED SmartLED Green 570NM	OSRAM	LG L29K-G2J1-24-Z	603	
2	D10, D12	LED, 5MM, RED, TH	VISHAY	TLHR6405	-	
1	D13	DIODE ZENER 3.9V 500MW SOD123	Diodes Incorporated	MMSZ5228B-7-F	SOD123	
12	D15, D16, D17, D18, D19, D20, D35, D36, D41, D42, D47, D48	Diode, P-N, 70V, 0.2A, SOT-323	Diodes Inc	DESD1P0RFW-7	SOT-323	

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8	D21, D23, D32, D33, D37, D39, D43, D45	Diode, Schottky, 20V, 0.5A, SOD-123	Fairchild Semiconductor	MBR0520L	SOD-123	
8	D22, D24, D31, D34, D38, D40, D44, D46	Diode, Zener, 6.2V, 1W, PowerDI123	Diodes Inc.	DFLZ6V2-7	PowerDI123	
16	FB1, FB2, FB3, FB4, FB5, FB6, FB7, FB10, FB13, FB14, FB17, FB18, FB19, FB20, FB21, FB22	FERRITE CHIP 1000 OHM 300MA 0603	TDK Corporation	MMZ1608B102C	603	
15	FB9, FB11, FB12, R67, R68, R69, R70, R79, R80, R81, R82, R90, R91, R92, R93	RES, 332 k, 1%, 0.25 W, 1206	Panasonic	ERJ-8ENF3323V	1206	
1	J3	Header, 7x2, 100mil, SMT	Molex	N2514-6002-RB	Header, 100 mil, 7x2, SMT	
2	J6, J28	3 pin berger	FCI	68001-403HLF	Connector,RA, Battery 3Pos, 3mm Pitch	
1	J8	Header, TH, 100mil, 12x2, Gold plated, 230 mil above insulator	FCI	67997-424HLF	12x2 Header	
12	J10, J11, J18, J19, J20, J21, J22, J23, J24, J25, J26, J27	Header, 2.54 mm, 2x1, Gold, TH	Würth Elektronik eiSos	61300211121	Header, 2.54mm, 2x1, TH	
4	J14, J15, J16, J17	TERMINAL BLOCK 5.08MM VERT 2POS, TH	On-Shore Technology	ED120/2DS	TERM_BLK, 2pos, 5.08mm	
2	Q1, Q2	MOSFET, N-CH, 30V, 22A, SON 2X2 MM	TEXAS INSTRUMENTS	CSD17571Q2	DQK	
3	R1, R9, R22	RESISTOR, SMD, 0.003 OHM, 1%, 5W, 3921	VISHAY DALE	WSLP39213L000FEB		
12	R2, R4, R11, R14, R24, R26, R63, R65, R74, R77, R86, R89	RES, 12.0, 1%, 0.1 W, 0603	Yageo America	RC0603FR-0712RL	603	
12	R3, R5, R12, R15, R23, R25, R64, R66, R75, R78, R87, R88	RES, 10.0 ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060310R0FKEA	603	
8	R6, R7, R19, R21, R33, R55, R57, R105	RES, 3.9k ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW06033K90JNEA	603	
1	R13	RES, 47k ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW060347K0JNEA	603	
4	R16, R17, R18, R20	RES 10K OHM 1/10W 5% 0603 SMD	Vishay-Dale	CRCW060310K0JNEA	603	
12	R29, R30, R31, R32, R34, R35, R41, R42, R45, R48, R50, R51	RES, 1.00 k, 0.1%, 0.1 W, 0603	Susumu Co Ltd	RG1608P-102-B-T5	603	
2	R40, R43	RES, 4.70k ohm, 1%, 0.1W, 0603	Yageo America	RC0603FR-074K7L	603	
3	R53, R54, R76	RES, 300 ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW0603300RJNEA	603	
2	R56, R58	RES, 330 ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW0603330RJNEA	603	
4	R59, R71, R83, R98	RES, 0 ohm, 5%, 0.125W, 0805	Vishay-Dale	CRCW08050000Z0EA	805	
3	R60, R72, R84	RES SMD 1.02K OHM 1% 1/4W 1206	Yageo America	RC1206FR-071K02L	1206	
4	R94, R99, R101, R103	RES, 11.5k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060311K5FKEA	603	
4	R95, R100, R102, R104	RES, 3.16 k, 1%, 0.1 W, 0603	Yageo America	RC0603FR-073K16L	603	
1	S1	Switch, Tactile, SPST-NO, 0.1A, 16V, SMT	Bourns	7914G-1-000E	4.93x4.19x6.2 mm	
4	T1, T2, T3, T5	Transformer 469uH SMD	Würth Electronics Midcom	750342271	10.05mm L x 6.73mm W	
6	U1, U3, U5, U11, U12, U14	Fully-Differential Isolation Amplifier, DUB0008A	Texas Instruments	AMC1100DUBR	DUB0008A	
4	U2, U4, U6, U10	Transformer Driver for Isolated Power Supplies, DBV0005A	Texas Instruments	SN6501DBV	DBV0005A	
1	U7	Mixed Signal Microcontroller, RGZ0048B	Texas Instruments	MSP430FR5869RGZ	RGZ0048B	
1	U13	IC, 300-mA 40-V LOW-DROPOUT REGULATOR WITH 25-uA QUIESCENT CURRENT	TI	TPS7A6533QKVURQ1	PFM	

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4	U15, U19, U21, U23	-36V, -200mA, Ultralow-Noise, Negative Linear Regulator	Texas Instruments	TPS7A3001DGNR	MSOP-PowerPAD (DGN)   8	
4	U16, U20, U22, U24	Regulator, LDO, 5V, 0.15A, SOT23-5	Texas Instruments	TLV70450DBV	DBV0005A	
0	C39, C48	CAP, CERM, 18pF, 50V, +/-5%, COG/NPO, 0603	MuRata	GRM1885C1H180JA01D	603	DNI
0	C40, C41	CAP, CERM, 12pF, 50V, +/-5%, COG/NPO, 0603	AVX	06035A120JAT2A	603	DNI
0	R8, R10, R27, R28	RES, 0 ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW06030000Z0EA	603	DNI
0	R39, R44, R47, R52, R97, R107	RES, 160 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW0603160KFKEA	603	DNI
0	R61, R73, R85	RES, 2.40 k, 1%, 0.25 W, 1206	Yageo America	RC1206FR-072K4L	1206	DNI
0	Y1	CRYSTAL, 32.768KHz, 6PF, +/-20PPM, SMD-3P	CITIZEN	CMR200T-32.768KDZBT	-	DNI
0	Y2	Crystal, 8MHz, 18pF, SMD	Abracon Corporation	ABLS-8.000MHZ-B4-T	Crystal, 11.4x4.3x3.8mm	DNI

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